

Claims

1. Fibre guide channel for an open end spinning device, for the pneumatic transportation of individual fibres, which are combed out of a feed fibre band by an opening cylinder rotating in an opening cylinder housing, to a spinning rotor running at a high speed in a rotor housing that can be subjected to a negative pressure, characterised in that the fibre guide channel (13) is configured as a hollow body, the internal cross-section of which decreases toward its orifice (26), the fibre guide channel (13) being produced by a manufacturing method, in which a first over-sized blank shape is initially produced by injection moulding from a mixture of a sinterable material and a binder and is converted into a porous intermediate shape by removing the binder and brought into a final shape which requires little finishing by sintering.

2. Fibre guide channel according to claim 1, characterised in that a metal powder is used as the sinterable material.

3. Fibre guide channel according to claim 1, characterised in that an oxide ceramic powder is used as the sinterable material and is processed with the binder to form pellets.

4. Method for producing a fibre guide channel for an open end spinning device, for the pneumatic transportation of individual fibres, which are combed out of a feed fibre band by an opening cylinder rotating in an opening cylinder housing, to a spinning rotor running at a high speed in a rotor housing that can be subjected to a negative pressure, characterised in that the fibre guide channel (13) is produced

using the following method steps, producing a mixture from a sinterable material and a binder, producing a blank body from this mixture by powder injection moulding, releasing the blank body from its binder portions and hardening the porous blank body by sintering into its final shape.

5. Method according to claim 4, characterised in that the inner contour of the fibre guide channel can be influenced by targeted mass concentration at the outer periphery.

6. Method according to claim 4, characterised in that the surface structure of the fibre guide channel can be influenced by the material of the sinterable material, the grain size of the material and the binder removal and sintering parameters.

7. Method according to claim 4, characterised in that at least one insertion piece (27) arranged in the region of an inlet opening (18) of the fibre guide channel is manufactured by the above method steps.

8. Method according to claim 4, characterised in that the fibre guide channel (13) can be subjected to a heat treatment (for example nitration, boration, etc.).

9. Method according to any one of the preceding claims, characterised in that the surface of the fibre guide channel (13) that comes into contact with the individual fibres, is coated.